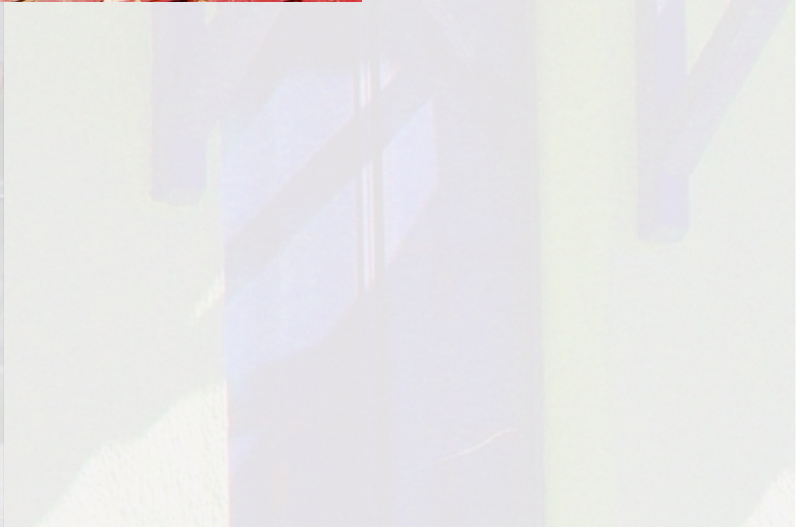
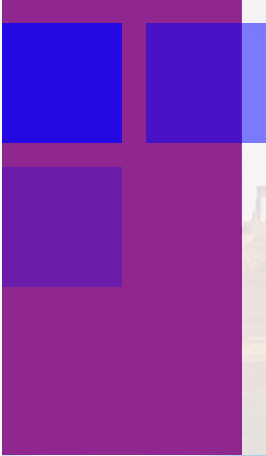


# 4



# 4

## CHAPTER FOUR

# POPULATION, HOUSING AND LAND ABSORPTION



“The American Dream is changing. The future is not necessarily a linear extension of the past, and yesterday’s market is not necessarily tomorrow’s...American metropolitan areas can recapture their livability and maintain the precious qualities that we cherish in everyday life, even as they grow and change for the future.

*--Peter Calthorpe and William Fulton--in “The Regional City”*

## Rational land use...

decisions cannot be made without first understanding the demographic environment in which they will take place.

Previous plan updates focused mainly on Marion County and the needs of its population. However: increasing regional concerns are causing citizens within Marion County and the surrounding jurisdictions to realize that cooperation is necessary, to achieve regional goals. Counties within the Indianapolis Metropolitan Area include Boone, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, and Shelby (see map, page 47).

Before the Comprehensive Plan Update began to take place, the Department of Metropolitan Development, Division of Planning contracted with an independent consultant to obtain population and employment projections to the year 2025. This section builds upon those projections and utilizes available Census 2000 information.

### Current Situation and Trends

As of the 2000 Census, Marion County is still the largest county in the state of Indiana in both urbanized area and population. The county population increased from 797,159 to 860,454 persons between 1990 and 2000 (63,295 persons, 7.9% increase). This was the second largest numeric increase in population in the Indianapolis Metropolitan Statistical Area. During the same period Hamilton County (north of Marion County) increased from 108,936 to 182,740 persons (73,804 persons, 67.7% increase).

During the 1960s Marion County's population increased rapidly from 697,567 to 792,299 persons. The 1970s brought a period of population decline, but the population rebounded during the 1980s and continued to increase through the 90's. Marion County's population in 2000 far exceeded that of projections from Indiana University, the State Board of Health, and even the Division of Planning.

Population Trends, 1970 to 2000					
	1970	1990	2000	Percent Change 1970-2000	Percent Change 1990-2000
Indianapolis Metro	1,251,400	1,385,400	1,607,496	28.5%	16.0%
State of Indiana	5,203,700	5,555,100	6,080,485	16.8%	9.5%
United States	203,798,700	249,438,700	281,421,906	38.1%	12.8%
Source: U.S. Census Bureau					



The metropolitan area has grown by about 356,096 people since 1970 when the population of the nine-county area was 1,251,400. For the three decades since 1970, the overall population growth rate has been about 8.5 percent.

Over the same 30 years, the state of Indiana's population increased by 16.8 percent while the national population grew 38.1 percent. In the 1990s alone, Indiana added 9.5 percent more residents and the U.S. as a whole added 12.8 percent.

## Population by County

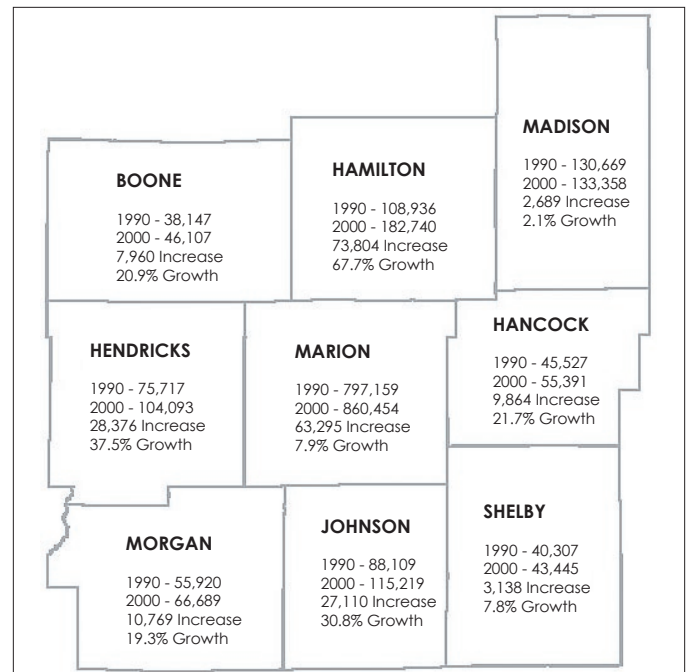
Within the Indianapolis metropolitan area, Marion County has long been the most populous of the nine counties. Its 860,454 residents represented more than half (53.5%) of the metro area's total population of 1,607,496 in 2000. But this proportion has declined during the past 30 years as population growth has been coupled with suburbanization of the surrounding counties. For example, in 1970, the population of Marion County was 793,800 or nearly two-thirds (63.4%) of the metro area's population of 1,251,400.

While Marion County grew 8.4 percent between 1970 and 2000, Hamilton County more than tripled its population and Johnson County added 78 percent more residents. Over the same 30-year period Madison County decreased by 3.6 percent. The other five counties collectively increased in size by about fifty percent between 1970 and 2000.

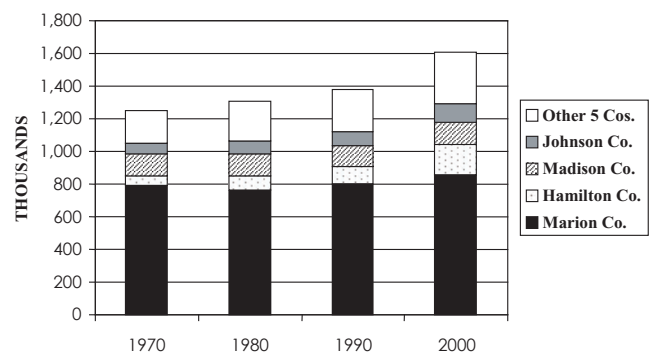
## Households and Employment

The metropolitan area's 28.5 percent population growth between 1970 and 2000 was accompanied by even more rapid growth in households (defined as occupied housing units) and employment (i.e., number of jobs located in the region).

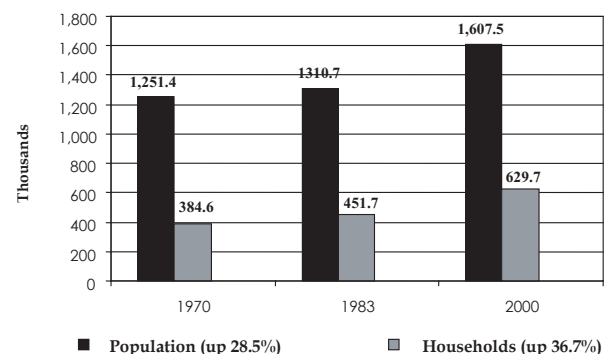
The following graph illustrates that the number of households within the metropolitan area increased by 54.2 percent, about 2.5 times the rate of population growth, because of decreasing household sizes. This is predominately due to the maturation of the post-World War II baby boom generation which moved out of its



Population of Selected Counties In Metropolitan Indianapolis, 1970-2000



Population and Households in Metropolitan Indianapolis, 1970-2000



parents' homes during the 1970s and early 1980s to create "new" households while leaving behind an existing household—albeit with fewer persons per household. Other contributing factors to this trend were higher divorce rates (effectively creating two households where there used to be one) and a greater propensity of Americans to live alone, thereby creating a larger proportion of single-person households.

The total number of households in Marion County has increased from 319,821 in 1990 to 352,164 in 2000 (32,343 households, 10.1% increase). Family households make up 60.6% of the total number.

For much the same reason as the increase in number of households, the rate of job increase was more than three times that of population between 1970 and 1998. Projections showed that employment was up 72.4%, from 587,600 in 1970 to 1,013,000 in 1998. When the baby boomers created new households, they also sought employment. The American and Indianapolis economies responded by creating jobs in unprecedented numbers. Moreover, this was a period when women entered the labor force in proportions never before experienced in peacetime, a result of broader and longer education and the opportunities for increased economic well being.

Employment is growing much more slowly at present because of the high rates of labor force employment and because there are fewer people entering the labor force in the generations after the baby boomers. The nature of contemporary work, however, is no longer as physically taxing as in decades past due to greater technology in goods producing sectors and more jobs in the services sectors. Thus, people are encouraged to remain in the labor force longer or to return to labor force after retirement. Such factors are not only helping to maintain a high rate of employment, but to increase the size of the labor force beyond historic patterns.

## Diversity

In the 2000 Census, respondents could identify themselves as belonging to more than one race. Additionally, the Native Hawaiian and Other Pacific Islander population was included in

the Asian category in 1990 but was listed as a separate category in 2000. These two changes have introduced some ambiguity in comparisons of race data for 1990 and 2000. The Census Bureau refers to Hispanic origin as ethnicity and expects each resident to also identify with a Hispanic or Non-Hispanic ethnicity. In 1990 it appeared that a large number of Hispanics had chosen the Other Race category, writing "Hispanic: or "Cuban" or "Puerto Rican" or "Mexican" etc. beside their choice of Other Race. In Census 2000, the ethnicity question was placed before the race question, in an effort to avoid this confusion. However, despite the change in order of questions, an outcome similar to 1990 occurred.

According to the 2000 Census, 33,290 of Marion



County's 860,454 residents identified themselves as having a Hispanic ethnicity. This is nearly four times the number of those who identified themselves as "Hispanic" in the 1990 Census. As mentioned earlier, it is difficult to determine the actual Hispanic population due to confusion with the Census forms. However, there is evidence to support the claim that the growth in the number of Hispanic responses may be due to actual growth in the Hispanic population. The number of Hispanic births in the state of Indiana has risen from 2,900 in 1996 to almost 4,400 in 1999, for a growth rate of 49%.

The African American population has also increased over the past ten years. Between 1990 and 2000 the number of African American residents in Marion County and the M.S.A. both increased by 23 percent. However, in Marion County African Americans comprised 26 percent of the total population whereas in the M.S.A. they were only 14 percent.

## Land Absorption

Although during the 1990s Marion County's population increased by 7.9 percent, the amount of developed acres in the county increased by 43 percent. The last update of the Marion County Comprehensive Land Use Plan stated that 147,642 acres, or 60 percent, of Marion County's 246,070 acres was developed land. By 2000 the amount of developed land had increased to 211,330 acres, or 86 percent of the county.

The previous comprehensive plan update also stated that of the eight suburban townships, only Washington and Wayne were over 60 percent developed and that Franklin Township was the least developed at 20 percent. By 2000 Franklin had become 44 percent developed, Decatur was 63 percent, and the remaining townships were all over 85 percent developed. Washington, Wayne, and Center townships were nearly 100 percent developed.

Many factors contribute to such a rapid rate of land absorption, including a decreasing average household size, preference for larger lots, and dependence on the automobile.

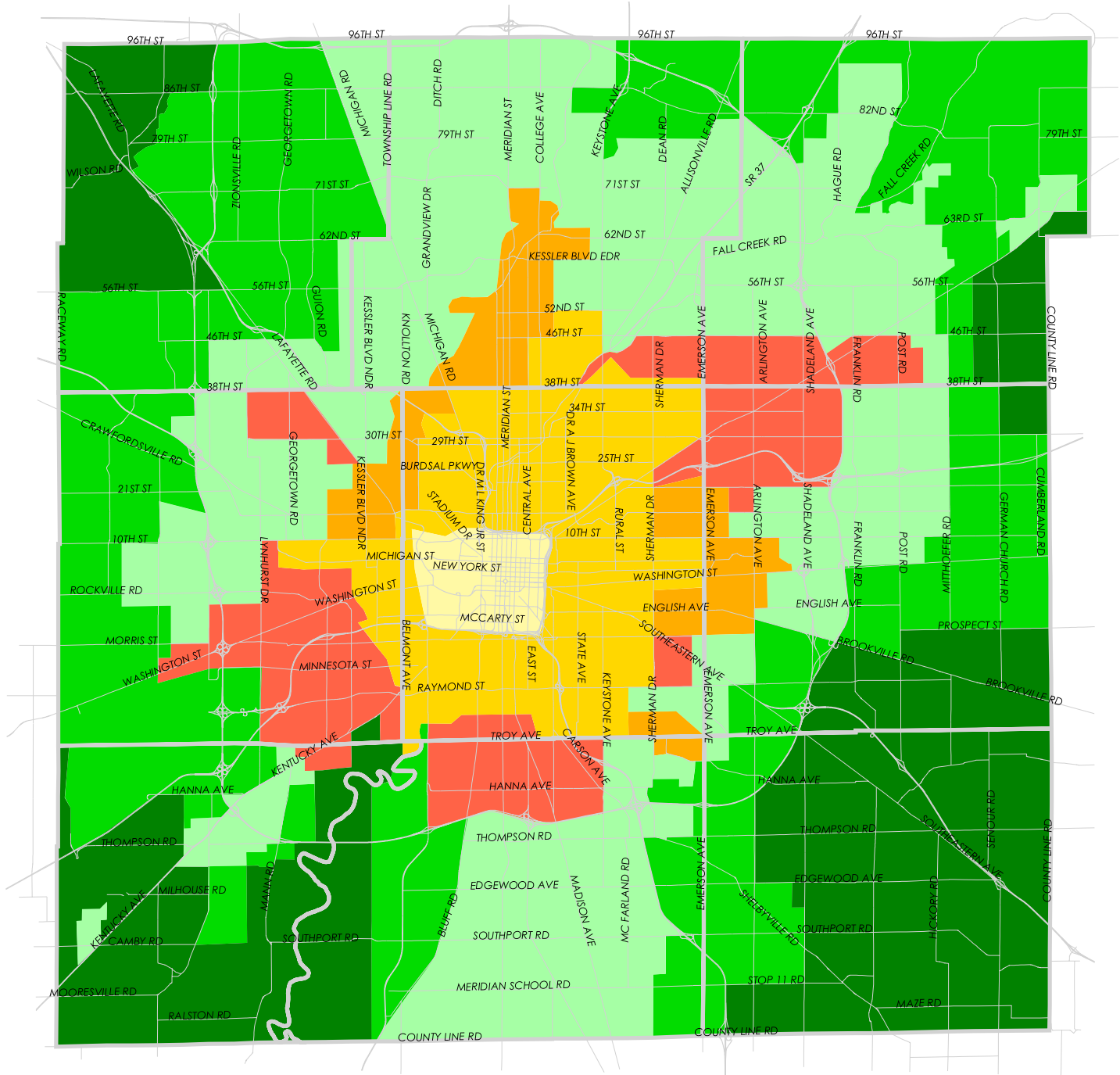
## Stages of Development

To illustrate how Indianapolis has grown and continues to grow, a Stages of Development map was drawn in 1990 and again in 2000. These maps show areas that were developed at roughly the same time and in similar patterns. They display how the county's urban form ranges from an intense downtown core to established neighborhoods, to suburban and rural areas experiencing intense development pressures. Identifying the areas of Marion County that correspond to certain stages of development makes possible the strategic targeting of appropriate policies, programs, and actions.

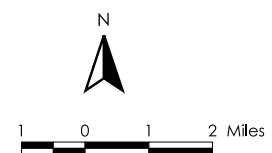
*Marion County's seven stages of development and their characteristics are as follows:*

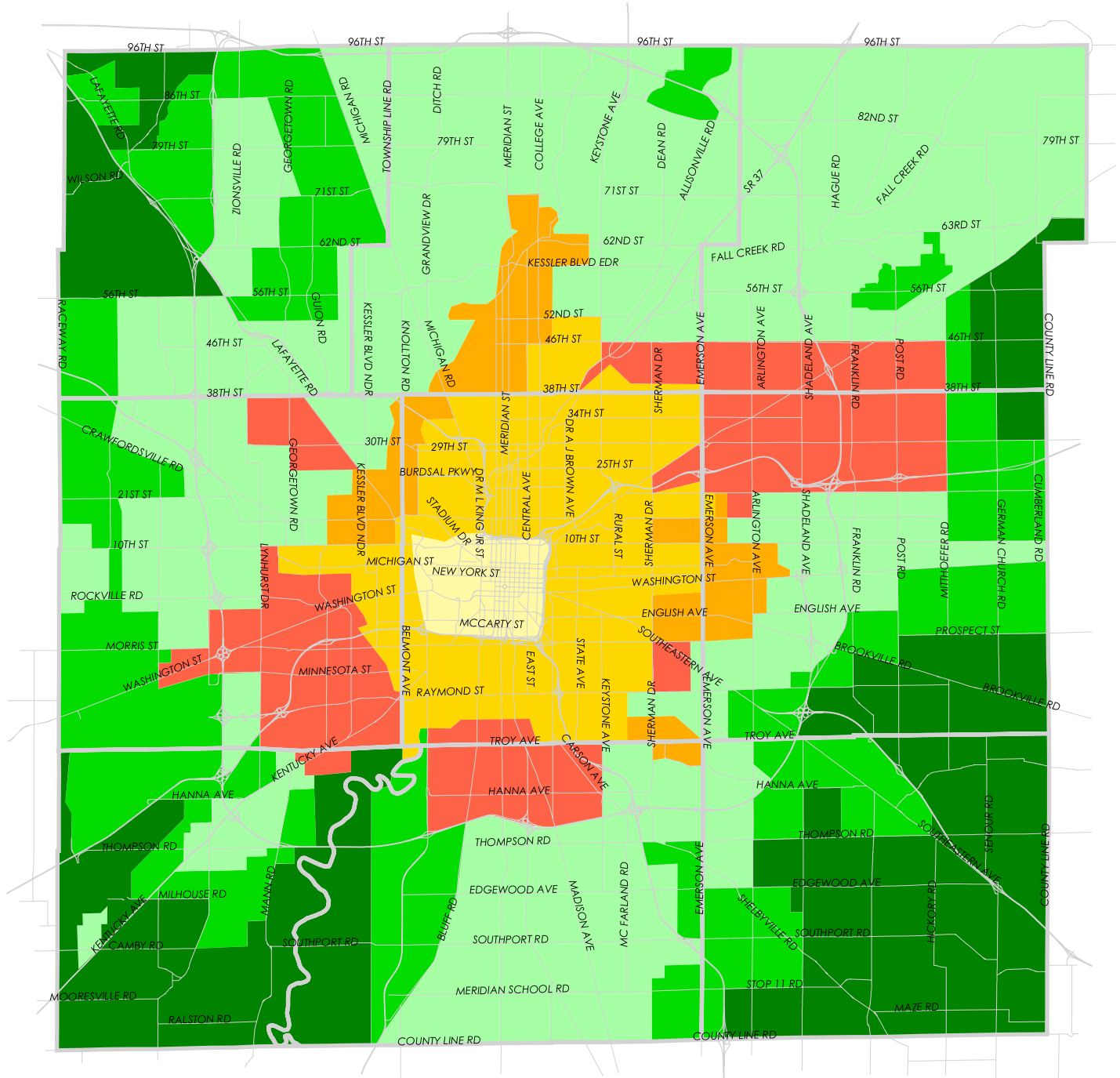
### Stage 1: The Regional Center

Property within this stage of development was initially platted and developed between 1821 and 1900. Nearly one hundred percent of the property has been developed. All community services are in place; but due to age, may need extensive repairs or added capacity to handle



1990 Stages of Development Map





2000 Stages of Development Map





redevelopment. The area has good highway capacity that meets the transportation needs except for some turns at intersections during peak commuter hours. The area contains high intensity, mixed uses, such as high rise office buildings, government centers, major retail centers and multistory apartment buildings.

#### Stage 2: Center City Revitalization Areas

Property within this stage of development was initially platted and developed between 1821 and 1950. A majority of this area has been completely developed; however many structures have been demolished leaving vacant lots and redevelopment and reinvestment is occurring in varying degrees. Traffic flows smoothly except for occasional peak hour decreases of the level of service at certain intersections. Infrastructure may need extensive repair or replacement due to age. Land uses include residential, commercial and industrial development that may exhibit obsolescence and deterioration.

#### Stage 3: Established Center City Areas

Property within this stage of development was initially platted and developed between 1821 and 1950 and is nearly totally developed. These areas tend to be stable neighborhoods with little deterioration. Roadway transportation services are acceptable except for occasional peak hour decreases of the level of service at certain intersections; however, infrastructure may need extensive repair or replacement due to age. Land uses include residential, commercial and industrial developments that are stable or experiencing restoration or reinvestment.

#### Stage 4: Suburban Revitalization Areas

The primary development of property within this stage of development began in approximately 1950 and some development continues today. Approximately eighty percent of the area is developed; however, disinvestment and deterioration may be present in the form of abandoned commercial buildings and deteriorating housing. Community services are available for most of the area. The majority of the area is adequately served by sanitary sewer and public water; however, the levels of service for roadways may be marginal to unacceptable for much of the area. Boundary lines between land uses are distinct and generally well defined.

#### Stage 5: Established Suburban Areas

The primary development of property within this stage of development began in approximately 1950 and continues today. Approximately eighty percent of the area is developed, and site improvements are in generally good to excellent condition. Community services are available for most of the area. The majority of the area is adequately served by sanitary sewer and public water; however, the levels of service for roadways may be marginal to unacceptable for much of the area. Boundary lines between land uses are distinct and generally well defined.

#### Stage 6: Developing Suburban Areas

The primary development of property within this stage of development began in approximately 1965 and continues today. Forty to eighty percent of the area is developed, and the development pattern does not clearly extend outward from a core area. Sanitary sewer

and public water have not been extended to a majority of the area. The existing or projected levels of service for roadways may be marginal and the general residential roadway system is disconnected between subdivisions, producing a local street pattern that lacks continuity. Future development may be predominantly infill development, so undeveloped transitional areas between major land uses are at a critical juncture due to the development of adjacent land.

#### Stage 7: Rural Areas

The primary development of this area began in 1970 and continues today; however, less than forty percent of the area is developed. These areas lack sanitary sewer and public water infrastructures, but projected levels of service on roadways are acceptable. Agriculture and woodlands are the predominant land use in this stage of development; however, residential development occurs on individually developed single family tracts on road frontages or consists of widely scattered suburban-style developments.

### Consequences of Continuing upon Current Trends

The amount of land absorbed every year by development depends on many different factors, including household size, density preferences, and the health of the economy. As household size decreases and average densities decrease, more land is used for development. Similarly, the health of the economy can help determine business expansion and development as well as the level of consumer spending. Therefore it is important to note that although projections can be a useful tool for decision-makers, they are not to be interpreted as absolute.

The following projections of land absorption in the nine county Indianapolis metropolitan area are based on projections of population, households, and employment. The following is projected to occur between 2000 and 2025:

Population is expected to continue to increase, but at a slower rate than in the past 10 years. It is projected to increase from 1,607,500 to 1,846,000 in the region, up 15 percent for the quarter century. This population growth between 1990 and 2000 was about 16 percent.

Households (or occupied housing units) are also projected to increase, but more rapidly than population. Continued trends in smaller average numbers of persons per household will cause the number of households to increase from 629,700 to 764,240, or 18 percent.

Employment in the metropolitan area is projected to increase from about 1,065,000 to 1,172,300, up 10 percent for the 25 years. This is slower than population growth, primarily because recent increases in employment are attributable to the large post World War II baby boom generation which will begin retiring after 2010. There are relatively fewer workers in subsequent age cohorts so the rate of job growth is expected to slow.

Although population, households, and employment will increase in the region over the next 25 years, Marion County is expected to have losses of population and employment. The County is projected to lose approximately 31,200 persons by the Year 2025. Population would decline about four percent. Employment in the county would also decline by two

percent as more jobs migrate to the increasing concentrations of labor force availability in the surrounding counties. While Marion County will remain the “largest” county in the region in terms of people, households, and jobs, it will lose some of its dominance:

- From 54 percent of the region’s population in 2000 to 45 percent in 2025;
- From 56 percent of the region’s households in 2000 to 48 percent in 2025;
- From 66 percent of the region’s jobs in 2000 to 58 percent in 2025.

These projections, however, are based on statistical trends. As mentioned earlier, the projections become altered when making projections about land use densities and the rate of development, which are affected by many different factors.

## **Land Absorption Scenarios**

Based upon these projections for the metropolitan area, three broad scenarios of land use absorption over the next 25 years were created. In each case, there is more growth projected for several of Marion County’s townships than these townships can rationally be expected to absorb. The projections, therefore, assume that the “over flow” will push into adjacent counties—i.e., the geographic direction of growth is assumed to radiate outward from the center of Indianapolis, not from township to township (other than from Center Township to the eight surrounding townships).

This spill over effect would actually cause Marion County’s population growth to be lower than what is shown above and the surrounding counties would experience higher growth rates. Overall metropolitan growth is assumed to remain the same.

Listed below are three different development scenarios. The first scenario is based upon current development trends and demonstrates the community’s present course. The second and third scenarios offer descriptions of what could happen if development trends were to become altered. The three scenarios assume the following:

### ***Current Trends***

The first scenario assumes that the density of future development in each jurisdiction will be the same as that which has taken place since 1980. That is, future density will be the same as that of the 1980-to-2000 period, not of the totality of development in each jurisdiction. The net effect is that average densities will be low and land absorption will be much greater than under the other scenarios. This scenario was judged by the Department of Metropolitan Development to be the most realistic.

### ***Central City Stabilization***

A second scenario assumes that Center Township will lose no more population—that its 2000 population (167,060) will remain constant and the initially projected loss of 27,520 people between 2000 and 2025 will not happen. This would require, of course, that enough housing construction and renovation occur to encourage people to remain in Center Township. But doing so would also slow the growth of the other townships that would have happened as a

result of out migration from Center Township. By slowing the growth of the other townships, there would also be slower growth in some of the outlying counties. The net result would be less pressure on land absorption.

### *Higher Density Development*

This scenario assumes that all future growth and development will occur at the average density of all existing development, separately calculated and projected for each county and township. For example, household growth in the future is assumed to have the same number of households per acre, on average, as in the past. To maintain an overall average density, many areas would need to be developed at a higher density than at present.

*The following table summarizes the land absorption projections of these three scenarios.*

PROJECTED ACRES OF LAND IN URBAN/SUBURBAN USES, 2025					
			SCENARIO 1	SCENARIO 2	SCENARIO 3
County	Total Acres	Existing Urban/Suburban Land in 2000	Current Trends, Densities from 1980 to 2000	Central City Stabilization	Higher Density
Boone	270,890	42,500	88,690	58,790	59,150
Hamilton	245,440	56,600	109,260	93,810	94,240
Hancock	196,200	19,700	38,520	22,260	22,260
Hendricks	261,480	38,030	81,430	61,770	62,250
Johnson	205,670	44,690	78,740	58,460	58,460
Madison	280,840	46,740	52,429	50,100	50,100
Marion	246,070	211,330	235,010	225,020	225,040
Morgan	261,850	35,100	61,190	45,180	45,180
Shelby	264,170	23,040	43,540	27,420	27,420
<b>Total</b>	<b>2,232,610</b>	<b>517,730</b>	<b>788,930</b>	<b>642,810</b>	<b>644,100</b>
Township					
Center	26,810	26,730	26,810	26,800	26,750
Decatur	20,700	13,070	19,240	14,770	14,810
Franklin	26,900	11,900	20,370	14,780	14,790
Lawrence	26,830	23,790	26,830	26,830	26,830
Perry	28,670	25,590	28,670	28,180	28,200
Pike	28,200	27,390	28,200	28,200	28,200
Warren	29,900	25,520	28,010	27,440	27,440
Washington	26,510	26,190	26,510	26,490	26,490
Wayne	31,540	31,150	31,540	31,530	31,530
<b>Total</b>	<b>246,060</b>	<b>211,330</b>	<b>236,180</b>	<b>225,020</b>	<b>225,040</b>



The first scenario (the most realistic one) would have the biggest impact. Two of the Marion County townships (Pike and Lawrence) have had slightly higher densities of development since 1980 due to high demand for new development, coupled with more economical and efficient land use patterns. But the other Marion County townships and all the other counties have had generally lower densities of development since 1980. Projecting this combination of more recent densities into the future results in the need for much



more urban/suburban land conversion. About 52 percent more urban/suburban land would be needed in the metro area between 2000 and 2025 (842,180 acres).

The impact on Marion County would not necessarily be dramatic, primarily because Marion County is already so developed that the most popular townships would become fully developed under any of the scenarios. A greater and faster “spillover” effect on adjacent counties, however, would contribute to the much more rapid pace of urban/suburban conversion in the outlying counties.

While the second scenario would benefit Center Township by re-occupying some underutilized land and increasing some density (particularly for more housing), the overall effect on conversion of land in Marion County to urban/suburban uses would be very small because the township is already virtually fully developed.

The resulting loss of pressure for growth in the other counties, however, would reduce the need for added urban/suburban land from 271,200 more acres to 125,080 in the M.S.A.. This would increase the amount of urban/suburban land in the metropolitan area by about the same percentage as in Scenario 3.

The third scenario would result in some 644,100 acres in urban/suburban uses, up from 517,710 in 2000, or the conversion of 126,370 acres from agricultural uses to urban/suburban uses (an increase of 24 percent.)



Marion County would see its

developed land increase from 211,330 (86 percent of the county) to 225,040 acres (91 percent of the county). Lawrence, Pike, Washington, and Wayne Townships would become effectively “full” while Center Township could see a slight statistical increase in its developed acres.

These three different scenarios demonstrate that it is impossible to predict what will happen in the future. By looking at what could happen, this community and those that surround it can create an approach to development that reflects citizen values.

*Listed below are several policy and planning implications from these projections:*

- Transportation networks would have to greatly expand—and rapidly—to accommodate the growth of Scenario 1 while the other two scenarios may be more manageable—keeping in mind that all three scenarios accommodate the same numbers of people, households, and jobs.
- Redevelopment can reduce the pressures on growth in the other jurisdictions but even the retention of 27,520 residents in Center Township does not have a huge impact on overall growth projections. A far broader and regional program of redevelopment, in-fill development, and higher density development would be needed to sharply reduce the pressures on land conversion. The City of Indianapolis probably cannot, unilaterally, have a major impact on such land demands.
- The location of jobs will have a strong impact on land use demands. Typically, jobs move to the labor force—although recent changes in the economy might also have different impacts on this normal pattern. With the advent of telecommunications, some of the workforce will no longer be tied to a specific location. Jobs may move out of the center city even more quickly. At the same time, quality of life issues are having an even greater impact on job location decisions so a strong urban mix of activities could lead to further concentrations of employment in the urban center.
- Finally, Indianapolis as a city and a region will need to closely observe the preferences of households for changing life styles and community amenities. There are strong current trends toward more urban housing/downtown life styles catering to childless families, suggesting opportunities for fulfilling Scenario 2. But telecommunications technology combined with good roads and transit systems can also mean that households can choose outlying locations while still having adequate access to the activities of the Center City.